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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

MILLER, TAKISHA S

ART UNIT PAPER NUMBER

2855

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/725,944

Applicant(s)

JAMES, THOMAS

Examiner

Takisha Miller

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Reference #55.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:

- a. On page 1, paragraph 3, line 2; "sense die 112" should be -- sense die 100 --;
- b. On page 4, paragraph 22, line 10; "ASIC 56" should be -- ASIC 57 --.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 11 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Wagner et al. (6,550,337)(hereinafter Wagner).

a. With respect to claims 1 and 3, Wagner teaches a pressure transducer (100) comprising a carrier (102/103) having a central aperture (110) for receiving fluid (109) from a vessel; a sense die (101) mounted on the carrier (102/103), the sense die (101) having a first side (101c) positioned to interact with the fluid (109) received from the vessel, pressure-sensing circuitry (Fig.2) formed on a second side (101d) of the sense die (101) and a non-metal covering for protecting the pressure-sensing circuitry (Col.7, lines 9-14).

b. With respect to claim 2, Wagner teaches a pressure transducer (100) wherein the carrier (102/103) is mounted within a housing (107) positioned and configured to confine fluid, entering the housing from the vessel, to the central aperture, contacting the circuitry (Fig.2).

c. With respect to claim 11, Wagner teaches a pressure transducer (100) comprising a carrier (102/103) having a central aperture (110) for receiving fluid (109) from a vessel, a sense die (101) mounted on the carrier (102/103), the sense die (101) having a first side (101c) positioned to interact with the fluid (109) received from the vessel, pressure-sensing circuitry/piezoresistive resistors formed on a second side (101d) of the sense die

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(101) and a ceramic board (115) mounted on the carrier (102/103), the ceramic board (115) bearing conductive paths electrically connecting the pressure-sensing circuitry to external circuitry (114)(Fig.2).

d. With respect to claim 12, Wagner teaches a pressure transducer (100) wherein the conductive paths are formed within the ceramic board (115) and have a first set of contacts (116) for electrically connecting to the pressure- sensing circuitry /piezoresistive resistors and a second set of contacts (114)(Fig.2) for electrically connecting to the external circuitry (Col.6, lines 26-39).

5. Claims 4-7 and 11-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Park et al. (5,329,819)(hereinafter Park).

a. With respect to claims 4,6,7,18,20 and 21, Park teaches a pressure transducer comprising a carrier (20/22) having a central aperture for receiving fluid from a vessel (Col.4, lines 23-26), a sense die (50) mounted on the carrier (20/22), the sense die having a first side positioned to interact with a fluid received from the vessel (Fig. 1) and a gel (40) forming a bond between the first side of sense die (50) and the carrier (20/22)(Col.4, lines 8-10).

b. With respect to claims 5 and 19, Park teaches a pressure transducer wherein the carrier (20/22) is mounted within a housing (12) positioned and configured to confine fluid entering the housing to the central aperture (Fig. 1).

c. With respect to claims 11-17 and 21, Park teaches a pressure transducer comprising a carrier (20/22) having a central aperture for receiving fluid from a vessel (Col. 4, lines 23-26), a sense die (50) mounted on the carrier (20/22), the sense die (50)

having a first side positioned to interact with the fluid received from the vessel, pressure-sensing circuitry (Col.3, lines 50-67) formed on a second side of the sense die (50) and a ceramic board (60) mounted on the carrier (20/22), the ceramic board (60) bearing conductive paths electrically connecting the pressure-sensing circuitry to external circuitry (Fig. 1).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 8 -10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park in view of Hartemann (4,317,372).

a. With respect to claims 8 and 9, Park teaches a pressure transducer but lacks teaching a cover configured to allow fluctuations of pressure of the defined volume relative to pressure external to the pressure transducer. Hartemann teaches a cover (19) which allows fluctuations of pressure of the defined volume relative to pressure external to the pressure transducer (Fig. 6). It would have been obvious to one of ordinary skill in the art to modify Park to include the above limitations as taught by Hartemann in order to effectively measure a depression in relation to the atmospheric pressure (see Hartemann; Col.3, line 61- Col. 4, line 31).

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b. With respect to claim 10, Park teaches a pressure transducer wherein the carrier (20/22) is mounted within a housing (12) positioned and configured to confine fluid entering the housing to the central aperture (Fig. 1).

8. Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al. (5,329,819). Regarding the temperature and pressure of the gel: Park discloses a gel but does not disclose a particular value for temperature and pressure. However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a gel maintaining a temperature of -40 to 150 degrees Celsius and a pressure of -14 to 15 pounds per square inch, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the "optimum range" involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Park to include the above limitations since it would have been readily known in the art using routine experimentation (MPEP 2144).

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Takisha Miller whose telephone number is (571) 272-2184. The examiner can normally be reached on Monday - Friday (7:00 am - 3:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.(toll-free).



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